

IN THE CLAIMS:

Please amend claims 1, 10, 19, and 28-30 as follows.

1. (Currently Amended) A method comprising:

determining an operating condition at a first router in a differentiated service network having a plurality of routers based on evaluation of incoming packets and computation of an effective load by each of the plurality of routers;

propagating an indication of said operating condition at said first router to a second router, wherein a signal indicating at least network traffic status is sent from each of the plurality of routers to a bandwidth broker, the signal of the operating condition of the first router being reflected in the indication; and

adjusting at least one parameter of constraint of incoming traffic flow based on said indication, wherein said adjusting comprises renegotiating the at least one parameter of constraint or providing a recommendation based on the at least one parameter of constraint,

wherein said adjusting comprises performing parameter mapping and resource usage calculation.

2. (Original) The method of claim 1, wherein said first router comprises a core router and said second router comprises an edge router.

3. (Original) The method of claim 1, further comprising:

determining an operating condition at a third router; and
propagating an indication of said operating condition at said third router to
said second router.

4. (Original) The method of claim 1, wherein said operating condition
comprises a status of stability.

5. (Original) The method of claim 1, wherein said indication comprises a
signal corresponding to a network traffic status.

6. (Original) The method of claim 5, wherein said network traffic status is
represented by a color.

7. (Original) The method of claim 1, further comprising said second router
making a profile change recommendation to a network operator.

8. (Original) The method of claim 1, further comprising said second router
renegotiating a constraint of said network.

9. (Original) The method of claim 8, wherein said renegotiating comprises
selecting from a plurality of constraints.

10. (Currently Amended) A method comprising:

receiving, at a second router, an indication of an operating condition at a first router in a differentiated service network having a plurality of routers, wherein the operating condition is determined in the first router based on evaluation of incoming packets and computation of an effective load by each of the plurality of routers and wherein a signal indicating at least network traffic status is sent from each of the plurality of routers to a bandwidth broker, the signal of the operating condition of the first router being reflected in the indication; and

adjusting at least one parameter of a constraint of incoming traffic flow based on said indication of said operating condition, wherein said adjusting comprises renegotiating the at least one parameter of constraint or providing a recommendation based on the at least one parameter of constraint,

wherein said adjusting comprises performing parameter mapping and resource usage calculation.

11. (Original) The method of claim 10 further comprising:

determining said operating condition at said first router; and

propagating said indication of the operating condition at said first router to a second router.

12. (Original) The method of claim 11, wherein said first router comprises a core router and said second router comprises an edge router.

13. (Original) The method of claim 12, further comprising:
determining an operating condition at a third router; and
propagating an indication of said operating condition at said third router to said second router.

14. (Original) The method of claim 10, wherein said operating condition comprises a status of stability.

15. (Original) The method of claim 10, wherein said indication comprises a signal corresponding to a network traffic status.

16. (Original) The method of claim 15, wherein said network traffic status is represented by a color.

17. (Original) The method of claim 10, wherein said adjusting comprises said second router renegotiating a constraint of said network.

18. (Original) The method of claim 17, wherein said renegotiating comprises selecting from a plurality of constraints.

19. (Currently Amended) A differentiated service network comprising:

a first router;

a second router coupled to said first router, said first router being associated with a first entity to determine an operating condition at the first router based on evaluation of incoming packets and computation of an effective load by each of a plurality of routers, wherein said first entity associated with said first router propagates an indication of said operating condition at said first router device to a the second router, wherein a signal indicating at least network traffic status is sent from each of the plurality of routers to a bandwidth broker, the signal of the operating condition of the first router being reflected in the indication; and

an adjusting unit configured to adjust at least one parameter of constraint of incoming traffic flow based on said indication, wherein said adjusting unit is configured to renegotiate renegotiating the at least one parameter of constraint or provide a recommendation based on the at least one parameter of constraint,

wherein said adjusting unit is configured to perform parameter mapping and resource usage calculation.

20. (Cancelled)

21. (Previously Presented) The differentiated service network of claim 19, wherein said second router is associated with a second entity that determines an operating condition at said second router.

22. (Original) The differentiated service network of claim 21, wherein said second entity renegotiates a constraint of said network.

23. (Original) The differentiated service network of claim 22, wherein renegotiating comprises selecting from a plurality of constraints.

24. (Previously Presented) The differentiated service network of claim 19, wherein said operating condition comprises a status of stability.

25. (Original) The differentiated service network of claim 24, wherein said indication comprises a signal corresponding to a network traffic status.

26. (Original) The differentiated service network of claim 19, wherein said first entity comprises a QoS Firewall entity.

27. (Original) The differentiated service network of claim 19, wherein said first router comprises a core router and said second router comprises an edge router.

28. (Currently Amended) An apparatus , said apparatus comprising:

determining means for determining an operating condition at a first router in a differentiated service network having a plurality of routers based on evaluation of incoming packets and computation of an effective load by each of the plurality of routers;

propagating means for propagating an indication of said operating condition at said first router to a second router, wherein a signal indicating at least network traffic status is sent from each of the plurality of routers to a bandwidth broker, the signal of the operating condition of the first router being reflected in the indication; and

adjusting means for adjusting at least one parameter of constraint of incoming traffic flow based on said indication, wherein said adjusting means comprises means for renegotiating the at least one parameter of constraint or providing a recommendation based on the at least one parameter of constraint,

wherein said adjusting comprises performing parameter mapping and resource usage calculation.

29. (Currently Amended) A second router comprising:

receiving means for receiving, at the second router, an indication of an operating condition at a first router, wherein the operating condition is determined in the first router based on evaluation of incoming packets and computation of an effective load by each of the plurality of routers and wherein a signal indicating at least network traffic

status is sent from each of the plurality of routers to a bandwidth broker, the signal of the operating condition of the first router being reflected in the indication; and

adjusting means for adjusting at least one parameter of a constraint of incoming traffic flow based on said indication of said operating condition, wherein said adjusting means comprises means for renegotiating the at least one parameter of constraint or providing a recommendation based on the at least one parameter of constraint,

wherein said adjusting comprises performing parameter mapping and resource usage calculation.

30. (Currently Amended) A first router, comprising:

coupling means for coupling the first router to a second router, said first router being associated with a first entity to determine an operating condition at the first router based on evaluation of incoming packets and computation of an effective load by each of a plurality of routers, wherein said first entity associated with said first router propagates an indication of said operating condition at said first router device to the second router, wherein a signal indicating at least network traffic status is sent from each of the plurality of routers to a bandwidth broker, the signal of the operating condition of the first router being reflected in the indication,

wherein the second router includes means adjusting at least one parameter of constraint of incoming traffic flow based on said indication, wherein said adjusting

means comprises means for renegotiating the at least one parameter of constraint or providing a recommendation based on the at least one parameter of constraint and, said adjusting means comprises means for performing parameter mapping and resource usage calculation.